

REMARKS

The above amendments cancel claims 6, 8, 16, 18, 25, 31-37 and 39-41, and amend independent claims 1, 9, 17, 24 and 38 and dependent claims 2-5, 7, 11-15, 19, 21, 26 and 28.

All the original independent claims 1, 9, 17, 24 and 38 were rejected under 35 U.S.C. 103(a) based on a combination of Rosner 6,298,376 and Sneeringer 6,618,709. Original dependent claims 6-7, 14-15, 22-23, 29-30, 36-37 and 39-40 were rejected under 35 U.S.C. 103(a) based on a combination of Rosner 6,298,376, Sneeringer 6,618,709 and Butland 6,301,527.

The Office Action alleges that “Rosner discloses an industrial power metering system comprising a power monitoring device . . . and an Ethernet communications device operatively coupled with said power monitoring device . . .” However, the term “Ethernet” cannot be found anywhere in Rosner. The patent refers to a local area network (“LAN”), but there are many different kinds of LAN’s. Thus, Rosner does not, in fact, disclose “an **Ethernet** communications device for a power monitoring system. This distinction applies to all the independent claims 1, 9, 17, 24 and 38, which will now be separately discussed in more detail.

APPARATUS CLAIMS

Independent Claim 1 and Dependent Claims 2-5 and 7

With respect to claim 1, the Office Action acknowledges that “Rosner does not explicitly disclose

- said processor and said communications interface further being operative for presenting said real-time information in a format useable by Hypertext Markup Language HTML pages.”

The Action goes on to allege that Sneeringer discloses such a processor and communications device.

Claim 1 has now been amended as follows:

1. (Currently Amended) An ethernet communications system for a A power monitoring system including multiple power monitoring devices; and, said ethernet communications system comprising an ethernet communication device operative in association with a within at least a selected one of said power monitoring device devices, said ethernet communications device including:
a processor capable of functioning as a master device;

a pair of on-board Ethernet ports for connecting said communication device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, said Ethernet ports comprising a single physical interface chip capable of supporting dual physical Ethernet media types,

an on-board serial port for connecting said communication device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain,

a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports, and

a communications interface capable of gathering, under control of said processor real time information from one or more slave devices;

said processor and said communications interface further being operative for presenting said real time information in a format useable by a Hypertext Transfer Protocol (HTTP) server operating on said processor for dynamically gathering, formatting and verifying real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing Hypertext Markup Language (HTML) pages.

The amended claim 1 requires a power metering system that includes multiple power monitors with at least one of those power monitors having an Ethernet communications device “within” that monitor. The amended claim also requires that the Ethernet communications device within the power monitor includes (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) the Ethernet ports comprise a single physical interface chip capable of supporting dual physical Ethernet media types, (3) an on-board serial port for connecting the communications device and the selected power monitoring device to others of the monitoring devices connected in a daisy chain, (4) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, and (5) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages.

Neither Rosner nor Sneeringer discloses a power monitor or meter having any of these features.

Rosner discloses a system that includes multiple monitors and a supplemental master, all connected to a LAN. Normally the master controls acquisition of data from the monitors, but if

the master fails, one of the monitors assumes the function of a master. As acknowledged in the Office Action, Rosner does not disclose the use of an HTTP server in either the supplemental master or any of the monitors, nor the use of HTML pages. In addition, neither the supplemental master nor a monitor substituting as a master has an Ethernet port for communicating via an Ethernet, nor are the monitors connected in a daisy chain. Finally, Rosner also does not disclose a master or a monitor having Ethernet ports for connecting to an Ethernet using either twisted-pair wires or optical fiber.

Sneeringer discloses a system that includes multiple meters that may be connected to a service provider network through modems or the internet. However, the meters (e.g., identified by reference numbers 10 through 26 in Fig. 4) do not include any of the features required by the amended claim 9 and discussed above. Specifically, Sneeringer's meters do not include (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) a single physical interface chip capable of supporting dual physical Ethernet media types, (3) an on-board serial port for connecting the communications device and the selected power monitoring device to others of the monitoring devices connected in a daisy chain, (4) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, and (5) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device

Thus, even if Sneeringer were somehow combined with Rosner, any resulting combination would still be lacking a power monitor containing the HTTP server, HTML pages, and Ethernet ports and single interface chip discussed above, and would also be lacking a daisy chain of power monitors or meters stemming from the power monitor containing the Ethernet communications device.

Dependent claims 2-5 and 7, all of which are dependent on claim 1, have been amended to be consistent with the language in amended claim 1. Claims 2-5 are believed to be allowable for the reasons set forth above with respect to claim 1.

In the rejection of original dependent claim 7, the Butland patent was added as a third reference, in combination with Rosner and Sneeringer. Butland was alleged to disclose the following:

- “a single physical interface chip capable of supporting dual physical Ethernet media types (col. 2, lines 59-67, col. 3, lines 1-13),” and
- “a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an N45 [sic] interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100 Base Fx fast fiber transceivers (col. 2, lines 59-67, col. 3, lines 1-13).”

However, the interfaces referred to in the Butland patent are in either a PC or an Ethernet gateway, not in a power monitor. In fact, as described on page 1 of the present application, one of the objectives of the present invention was to avoid the need for Ethernet gateway devices.

There is nothing in any of the cited references that would lead one of ordinary skill in the powering monitoring art to invent a power monitoring system having a power monitor with the unique combination of features required by applicants' amended claim 7. Indeed, to the contrary, the fact that all these references fail to suggest such a power monitor, and actually teach the use of more cumbersome systems, is a strong indicator that applicants' improved system was, in fact, not obvious to those working in this field.

Applicants' invention has been a huge commercial success in the power monitoring field. This system has been marketed by applicants' assignee, Square D Company, as a part of its ***Transparent Ready***® Power Distribution Equipment, with outstanding success. Submitted herewith are (1) a Declaration of Michael W. Pyle describing the commercial success of this invention, including the fact that the annual sales of the Square D product using the claimed invention have been sixfold those of the previous product offered by Square D for implementing Ethernet connections in a power monitoring system, and (2) copies of Square D sales literature for ***Transparent Ready***® products utilizing applicants' invention (attached as Exhibits A and B). The connection to the Ethernet can be made with either twisted pair wires or optical fiber cabling. Once the equipment has been connected to an Ethernet, it can be commissioned by simply entering the equipment's network address, with no need to shut down equipment or open access panels, which is also much more convenient, but also improves safety by eliminating the

attendant risk to operator pressure. The integral web server within the power monitor avoids the need for special end user software, and a web browser on any PC on the network can be used to log on to the equipment's home page. This allows access to real-time power system information from the power monitors through a standard web browser. Standard pages, such as summary views, can be transferred for devices daisy chained to the unique power monitor containing the embedded Ethernet communications device. This information can be viewed from virtually any location. The system can also be used to send emails on occurrences of alarm conditions.

If such a system had, in fact, been obvious to those working in this field, it surely would have been made and sold long before applicants' invention, because it clearly has met a huge need in this industry.

Independent Claim 9 and Dependent Claims 10-15

With respect to claim 9, the Office Action acknowledges that "Rosner does not explicitly disclose

- said processor and said communications interface further being operative for presenting said real-time information in a format useable by Hypertext Markup Language HTML pages."

The Action goes on to allege that Sneeringer discloses such a processor and communications device.

Claim 9 has now been amended as follows:

9. (Currently Amended) An industrial power metering system comprising:

[[a]] multiple power monitoring device devices; and
an Ethernet communications device within at least a selected one of
operatively coupled with said power monitoring device devices;

 said Ethernet communications device including
 a processor and
 a pair of on-board Ethernet ports for connecting said communications
device and said selected power monitoring device to an Ethernet via either twisted
pair wires or optical fiber,

an on-board serial port for connecting said communications device and
said selected power monitoring device to others of said monitoring devices
connected in a daisy chain,a communications interface capable, under control of
said processor, of gathering real time information from said power monitoring
device; and

a processor coupled to both said Ethernet ports and to said serial port for
controlling communications via all said ports, and

a web Hypertext Transfer Protocol (HTTP) server operating on said processor capable of communicating through said communications interface for dynamically gathering, formatting and verifying real-time information from both said selected [[the]] power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device.

The amended claim 9 requires a power metering system that includes multiple power monitors with at least one of those power monitors having an Ethernet communications device “within” that monitor. The amended claim also requires that the Ethernet communications device within the power monitor includes (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) an on-board serial port for connecting the communications device and the selected power monitoring device to others of the monitoring devices connected in a daisy chain, (3) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, and (4) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages.

Neither Rosner nor Sneeringer discloses a power monitor or meter having any of these features.

Rosner discloses a system that includes multiple monitors and a supplemental master, all connected to a LAN. Normally the master controls acquisition of data from the monitors, but if the master fails, one of the monitors assumes the function of a master. As acknowledged in the Office Action, Rosner does not disclose the use of an HTTP server in either the supplemental master or any of the monitors, nor the use of HTML pages. In addition, neither the supplemental master nor a monitor substituting as a master has an Ethernet port for communicating via an Ethernet, nor are the monitors connected in a daisy chain. Finally, Rosner also does not disclose a master or a monitor having Ethernet ports for connecting to an Ethernet using either twisted-pair wires or optical fiber.

Sneeringer discloses a system that includes multiple meters that may be connected to a service provider network through modems or the internet. However, the meters (e.g., identified

by reference numbers 10 through 26 in Fig. 4) do not include any of the features required by the amended claim 9 and discussed above. Specifically, Sneeringer's meters do not include (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) an on-board serial port for connecting the communications device and the selected power monitoring device to others of the monitoring devices connected in a daisy chain, (3) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, and (4) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device

Thus, even if Sneeringer were somehow combined with Rosner, any resulting combination would still be lacking a power monitor containing the HTTP server, HTML pages, and Ethernet ports discussed above, and would also be lacking a daisy chain of power monitors or meters stemming from the power monitor containing the Ethernet communications device.

Dependent claims 11-12 and 14-15, all of which are dependent on claim 9, have been amended to be consistent with the language in amended claim 9. Claims 10-13 are believed to be allowable for the reasons set forth above with respect to claim 9.

In the rejection of original dependent claims 14 and 15, the Butland patent was added as a third reference, in combination with Rosner and Sneeringer. Butland was alleged to disclose the following:

- “a single physical interface chip capable of supporting dual physical Ethernet media types (col. 2, lines 59-67, col. 3, lines 1-13),” and
- “a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an N45 [sic] interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100 Base Fx fast fiber transceivers (col. 2, lines 59-67, col. 3, lines 1-13).”

However, the interfaces referred to in the Butland patent are in either a PC or an Ethernet gateway, not in a power monitor. In fact, as described on page 1 of the present application, one

of the objectives of the present invention was to avoid the need for Ethernet gateway devices.

There is nothing in any of the cited references that would lead one of ordinary skill in the powering monitoring art to invent a power monitoring system having a power monitor with the unique combination of features required by applicants' amended claim 14 and 15. Indeed, to the contrary, the fact that all these references fail to suggest such a power monitor, and actually teach the use of more cumbersome systems, is a strong indicator that applicants' improved system was, in fact, not obvious to those working in this field.

If such a system had, in fact, been obvious to those working in this field, it surely would have been made and sold long before applicants' invention, because it clearly has met a huge need in this industry.

The attached Declaration of Michael W. Pyle and Exhibits A and B, all of which have been discussed above, also support a conclusion of non-obviousness of claims 9 and 10-15.

Independent Claim 38

With respect to claim 38, the Office Action acknowledges that "Rosner does not explicitly disclose

- said processor and said communications interface being operative for presenting said real-time information in a format useable by Hypertext Markup Language HTML pages."

The Action goes on to allege that Sneeringer discloses such a communications device, processor, interface and web server.

Claim 38 has now been amended as follows:

38. (Currently Amended) An Ethernet communications card apparatus for a power monitoring system that includes multiple power monitoring devices device, said Ethernet communications card being adapted for insertion within at least a selected one of said power monitoring devices and comprising [[;]]

a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, said Ethernet ports comprising a single physical interface chip capable of supporting dual physical Ethernet media types, and including a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers,

an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain,

a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports,

a Hypertext Transfer Protocol (HTTP) server operating on said processor for dynamically gathering, formatting and verifying real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device, said Ethernet communications device being capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus, said HTTP server being capable of sending data to a browser for dynamically formatting and verifying real-time data using JavaScript and VB script, and

a web browser capable of accessing said HTTP server and generating a login, and said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time

a processor capable of functioning as a master device;

a communications interface capable of gathering, under control of said processor real time information from one or more slave devices;

said processor and said communications interface further being operative for presenting said real time information in a format useable by Hypertext Markup Language (HTML) pages.

The amended claim 38 requires a power metering system that includes multiple power monitors with at least one of those power monitors having an Ethernet communications device “within” that monitor. The amended claim also requires that the Ethernet communications device within the power monitor includes (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) the Ethernet ports comprise a single physical interface chip capable of supporting dual physical Ethernet media types, (3) a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers, (4) an on-board serial port for connecting the communications device and the selected power monitoring device to others of the monitoring devices connected in a daisy chain, (5) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, and (6) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically

gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for sending data to a browser for dynamically formatting and verifying real-time data using JavaScript and VB script,, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device, (7) an Ethernet communications device capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus, and (8) a web browser capable of accessing the HTTP server and generating a login to which the processor responds by generating an access token for the browser for permitting access by the browser for a predetermined amount of time

Neither Rosner nor Sneeringer discloses a power monitor or meter having any of these features.

Rosner discloses a system that includes multiple monitors and a supplemental master, all connected to a LAN. Normally the master controls acquisition of data from the monitors, but if the master fails, one of the monitors assumes the function of a master. As acknowledged in the Office Action, Rosner does not disclose the use of an HTTP server in either the supplemental master or any of the monitors, nor the use of HTML pages. In addition, neither the supplemental master nor a monitor substituting as a master has an Ethernet port for communicating via an Ethernet, nor are the monitors connected in a daisy chain. Finally, Rosner also does not disclose a master or a monitor having Ethernet ports for connecting to an Ethernet using either twisted-pair wires or optical fiber.

Sneeringer discloses a system that includes multiple meters that may be connected to a service provider network through modems or the internet. However, the meters (e.g., identified by reference numbers 10 through 26 in Fig. 4) do not include any of the features required by the amended claim 38 and discussed above. Specifically, Sneeringer's meters do not include (1) a pair of on-board Ethernet ports for connecting the communications device and the selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) the single physical interface chip capable of supporting dual physical Ethernet media types, (3) a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an RJ45 interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100Base Fx fast fiber transceivers, (4) an on-board serial port for connecting the communications device and the

selected power monitoring device to others of the monitoring devices connected in a daisy chain, (5) an Ethernet communications device capable of using any of a plurality of protocols for either full duplex or half duplex communications, including SyMax, Modbus and Jbus, (6) a processor coupled to both the Ethernet ports and to the serial port for controlling communications via all the ports, or (7) a Hypertext Transfer Protocol (HTTP) server operating on the processor for dynamically gathering, formatting and verifying real-time information from both the selected power monitoring device and the other power monitoring devices connected to the serial port in a daisy chain, for communicating with an internet browser, and for accessing HTML pages, including custom HTML pages stored in the selected power monitoring device

Thus, even if Sneeringer were somehow combined with Rosner, any resulting combination would still be lacking a power monitor containing the features listed above, and would also be lacking a daisy chain of power monitors or meters stemming from the power monitor containing the Ethernet communications device.

In the rejection of certain of the original claims in this application, the Butland patent was added as a third reference, in combination with Rosner and Sneeringer. Butland was alleged to disclose the following:

- “a single physical interface chip capable of supporting dual physical Ethernet media types (col. 2, lines 59-67, col. 3, lines 1-13),” and
- “a fast Ethernet transceiver which provides a media independent interface for attachment to a 10/100 media access controller, and is capable of directly driving an N45 [sic] interface through magnetics and termination resistors and also provides a pseudo-ECL interface for use with 100 Base Fx fast fiber transceivers (col. 2, lines 59-67, col. 3, lines 1-13).”

However, the interfaces referred to in the Butland patent are in either a PC or an Ethernet gateway, not in a power monitor. In fact, as described on page 1 of the present application, one of the objectives of the present invention was to avoid the need for Ethernet gateway devices.

There is nothing in any of the cited references that would lead one of ordinary skill in the powering monitoring art to invent a power monitoring system having a power monitor with the unique combination of features required by applicants’ amended claim 38. Indeed, to the contrary, the fact that all these references fail to suggest such a power monitor, and actually teach the use of more cumbersome systems, is a strong indicator that applicants’ improved system was,

in fact, not obvious to those working in this field. If such a system had, in fact, been obvious to those working in this field, it surely would have been made and sold long before applicants' invention, because it clearly has met a huge need in this industry.

The attached Declaration of Michael W. Pyle and Exhibits A and B, all of which have been discussed above, also support a conclusion of non-obviousness of claim 38.

METHOD CLAIMS

Independent Claim 17 and Dependent Claims 19-23

The original independent method claim 17 was rejected under 35 U.S.C. 103(a) based on a combination of Rosner 6,298,376 and Sneeringer 6,618,709. This method claim has been amended in a manner similar to claim 38 discussed above, and thus it is respectfully submitted that the amended claim 17 is allowable for the reasons set forth above with respect to claim 38. The specific amendments made to claim 17 are as follows:

17. (Currently Amended) An ethernet communications method for a power monitoring system, said method comprising

monitoring an electrical power distribution system with multiple power monitoring devices at least a selected one of which contains an Ethernet communications device having (1) a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain, and (3) a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports ; and

dynamically gathering, formatting, verifying and communicating real-time information from both said selected power monitoring device and said other power monitoring devices connected to said serial port in a daisy chain, presenting said real time information in a format useable by Hypertext Markup Language (HTML) pages, under the control of said processor and using a Hypertext Transfer Protocol (HTTP) server capable of communicating through both said Ethernet ports and said serial port,

accessing said HTTP server via a web browser and generating a login, said processor responding to said login by generating an access token for said browser for permitting access by said browser for a predetermined amount of time, and

accessing HTML pages, including custom HTML pages stored in the selected power monitoring device, via said HTTP server.

Dependent claims 19 and 21, both of which are dependent on claim 17, have been amended to be consistent with the language in amended claim 17. Dependent claims 19-21 are

believed to be allowable for the reasons set forth above with respect to claim 38, and dependent claims 22 and 23 are believed to be allowable for the reasons set forth above with respect to claim 7.

The attached Declaration of Michael W. Pyle and Exhibits A and B, all of which have been discussed above, also support a conclusion of non-obviousness of claims 17 and 19-23.

Independent Claim 24 and Dependent Claims 26-30

The original independent method claim 24 was rejected under 35 U.S.C. 103(a) based on a combination of Rosner 6,298,376 and Sneeringer 6,618,709. This method claim has been amended in a manner similar to claim 9 discussed above, and thus it is respectfully submitted that the amended claim 24 is allowable for the reasons set forth above with respect to claim 9. The specific amendments made to claim 24 are as follows:

24. (Currently Amended) An industrial electrical power metering monitoring method comprising:

monitoring an electrical power distribution system with multiple power monitoring devices at least a selected one of which contains an Ethernet communications device having (1) a pair of on-board Ethernet ports for connecting said communications device and said selected power monitoring device to an Ethernet via either twisted pair wires or optical fiber, (2) an on-board serial port for connecting said communications device and said selected power monitoring device to others of said monitoring devices connected in a daisy chain, and (3) a processor coupled to both said Ethernet ports and to said serial port for controlling communications via all said ports; and

gathering real time information from said power monitoring; and

dynamically gathering, formatting, verifying and communicating real-time information from [[the]] both said selected power monitoring device and said other power monitoring device devices connected to said serial port in a daisy chain, in a format usable by HTML pages, under the control of said processor and using a Hypertext Transfer Protocol (HTTP) server capable of communicating through both said Ethernet ports and said serial port.

Dependent claims 26 and 28, both of which are dependent on claim 24, have been amended to be consistent with the language in amended claim 24. Dependent claims 26-28 are believed to be allowable for the reasons set forth above with respect to claim 24, and dependent claims 29 and 30 are believed to be allowable for the reasons set forth above with respect to claims 14 and 15.

The attached Declaration of Michael W. Pyle and Exhibits A and B, all of which have been discussed above, also support a conclusion of non-obviousness of claims 24 and 26-30.

CONCLUSION

Applicants respectfully submit that all the claims remaining in this application are in condition for allowance, and such action is earnestly solicited. If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is respectfully requested to contact Applicants' undersigned attorney at the number indicated.

It is believed that no additional fees are presently due; however, should any additional fees be required (except for payment of the issue fee), the Commissioner is authorized to deduct the fees from Deposit Account No. 50-4181/247181-000244 for any fees inadvertently omitted which may be necessary now or during the pendency of this application, except for the issue fee.

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Respectfully submitted,

By /Stephen G. Rudisill, Reg. 20,087/
Stephen G. Rudisill
NIXON PEABODY LLP
161 N. Clark Street, 48th Floor
Chicago, Illinois 60601
(312) 425-3900
Attorneys For Applicant